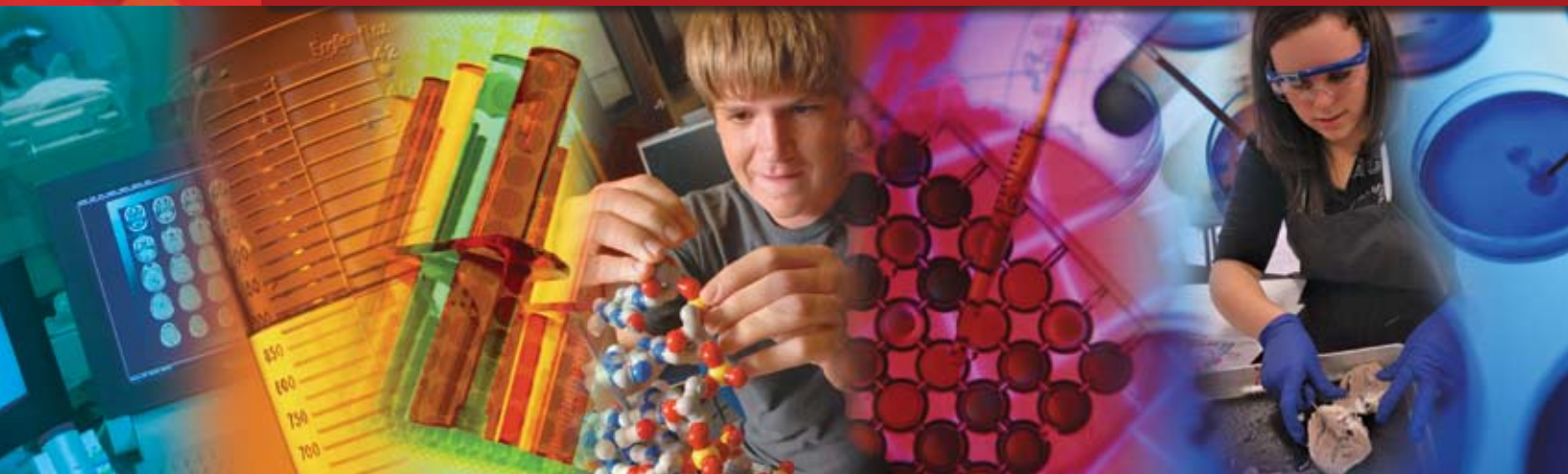


PLTW: Forging the Innovation Generation



# Biomedical Sciences



*An introduction for schools*

- Overview
- Curriculum
- Benefits



# Dear Colleague,

**T**he U.S. Department of Labor predicts that eight of the twenty careers with the highest demand for employees in the next decade will be in the health care sector. As the baby boom generation retires and as our nation's population ages, the demand for both health and science professionals and health care-related services will continue to grow.

To meet the demand for employees with a strong background in the biomedical sciences, the departments of education for Connecticut, Maryland, Missouri, Ohio, Oklahoma, and South Carolina, and the Department of Workforce Development for Indiana provided funding to Project Lead The Way, Inc., to develop a high school program focused on the biomedical sciences.

The Project Lead The Way® (PLTW) Biomedical Sciences Program prepares students to take advantage of the tremendous career opportunities available in health and science. The hands-on, project-based, and problem-based curriculum engages students, allows them to explore the wide variety of health care and science career options, and equips them with the knowledge and skills necessary to succeed in any postsecondary biomedical sciences program.



**Carolyn Malstrom, Ph.D.**  
Director of Curriculum  
for the Biomedical Sciences  
Project Lead The Way, Inc.



Summit Technology Academy students design and build a pump in their Principles of the Biomedical Sciences class. (From left) **Kevin Gray, Kailey Shockley**, instructor **Peggy Hinzman**, and **CiCi Williams**.

The students and teachers in this publication are all part of the Project Lead The Way® (PLTW) Biomedical Sciences Program. The four schools featured are **Fort Mill High School** in Fort Mill, South Carolina; **Hamilton Southeastern High School** in Fishers, Indiana; **McKenzie Career Center** in Indianapolis, Indiana; and **Summit Technology Academy** in Lee's Summit, Missouri.

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Hamilton Southeastern High School student **Kaylin Leuthold** practices a lab technique.



**Want to offer the innovative PLTW Biomedical Sciences curriculum at your school? Learn how at [www.pltw.org](http://www.pltw.org) or call 518-877-6491.**

*“It is thrilling to me as a teacher to see the level of excitement these students have when they walk in the door each day.”*

**Karolyn Bell**  
Dean of Health Science and Human Services,  
Hanna-Westside Extension Campus, Anderson, South Carolina



# Limitless Possibilities

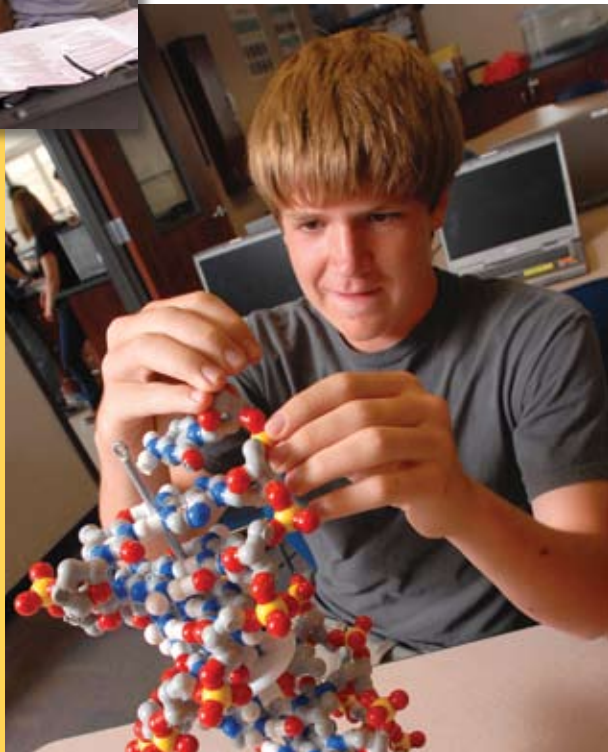
*Demographic changes are driving the need for health care professionals*



Fort Mill High School students **Katelyn Park, Heather Petrie, Bryan Castillo, and Angie Case.**

## What Is the Biomedical Sciences Field?

**B**iomedical sciences is a broad field encompassing many different medical and health care disciplines. These include biochemistry, biomedical engineering, dentistry, forensics, microbiology, immunology, pharmacology, physiology, radiological sciences, and more. The Project Lead The Way® (PLTW) Biomedical Sciences curriculum gives students the academic foundation to enter any of these fields.



Hamilton Southeastern High School student **Max Crouse** works with a DNA model.

## BOOM!

**T**hat's the impact the nearly 80 million Americans born between 1946 and 1964 have made on how our nation lives, works, studies, and plays for the past few decades. And now that the first wave of these U.S. "baby boomers" is approaching age 65, their sheer numbers are creating a gigantic boom in the need for health- and science-related innovations, opportunities, careers, and services.

The beneficiaries of this aging explosion will be the next generation of biomedical science professionals: today's students.

According to the Bureau of Labor Statistics (BLS), the health services sector is projected to grow more than any other industry (about 30.3 percent) through 2014. BLS projections indicate, for example, that health care and social assistance—including private hospitals, nursing and residential care facilities, and individual and family services—will add 4.3 million jobs to the U.S. economy by 2014.

## And that's just the beginning.

Our nation's aging population—combined with longer life expectancies and rapidly advancing technology—has created a growing demand for highly skilled professionals in a broad spectrum of health care and science careers. These include paramedics, biomedical engineers, medical illustrators, occupational and physical therapists, medical physicists, scientific and pharmaceutical researchers, forensic scientists, doctors, nurses, and radiological and surgical technicians.

The career possibilities are limitless for young people with a solid foundation in health and science. And that's precisely what the Project Lead The Way® (PLTW) Biomedical Sciences curriculum offers to U.S. students, teachers, and schools.

(At right) Summit Technology Academy student **Tori Shaffer** applies glycerin to glass tubing to lubricate it before inserting it into the rubber stopper that caps a flask.



(Above) **Bradley Gano** and **Kiersten Porcelli** share a laugh during their Biomedical Sciences class at Fort Mill High School.

**“**One of the major industry clusters in our state is life and health sciences. To remain competitive in this high-technology sector, it is vital that we maintain a well-trained workforce. Project Lead The Way Biomedical Sciences provides a rigorous, inquiry-based curriculum, which better prepares our students for the workplace or postsecondary education in these fields.**”**

**—Ann Shane,**  
Vice President, BioCrossroads, Indianapolis, Indiana

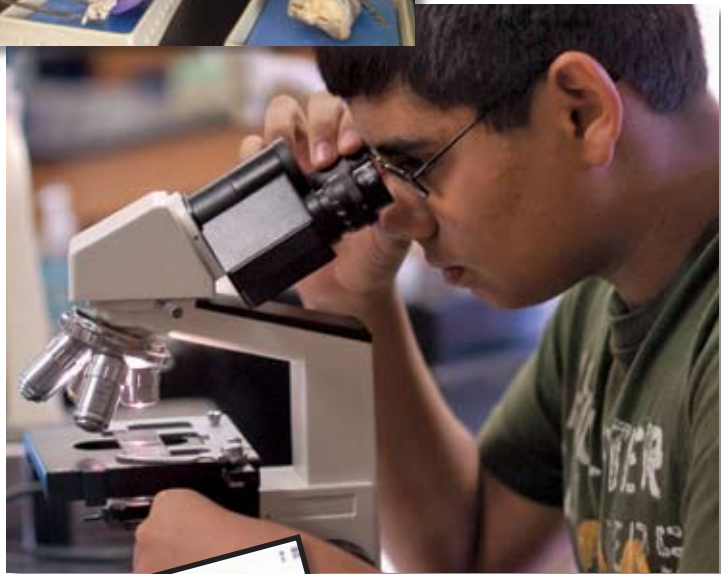


# The Sequence of Success

*Approach is the same as with the successful PLTW Engineering Program*



Hamilton Southeastern High School teacher **Marva Moore** (center) dissects a sheep heart with students (from left) **Nelson Wong, Kalp Juthani,** and **Hilary Garwood.**



**Bryan Castillo** looks through the microscope during his Biomedical Sciences class at Fort Mill High School.



**A**lthough the Project Lead The Way® (PLTW) Biomedical Sciences curriculum is new, the organization's commitment to education improvement is not. Since 1997, the PLTW model of combining a rigorous and relevant curriculum with project- and problem-based instruction has helped transform engineering and STEM (Science, Technology, Engineering, and Mathematics) education in the United States. Today, there are more than 2,000 PLTW schools in 49 states and the District of Columbia, educating more than 175,000 students.

Research shows that PLTW students are five times as likely as other students to choose engineering and related disciplines in college, and they are more likely to remain enrolled in college engineering, science, and related programs than other students in those areas. What PLTW has already done for engineering, it now is doing for biomedical sciences.

The sequence of high school courses in the Biomedical Sciences Program parallels the proven PLTW engineering curriculum. The initial program includes four courses, all aligned with appropriate national learning standards:

- Principles of the Biomedical Sciences™
- Human Body Systems™
- Medical Interventions™
- Science Research™

*(For descriptions of each course, see page 10.)*



Summit Technology Academy students **Antoinio Newbill** and **Anna Follette** assemble and plan the design of a pump in their Principles of the Biomedical Sciences class.

The first course, Principles of the Biomedical Sciences™, is being piloted during the 2007–08 school year in 42 schools located in the seven states that provided funding to develop the program. In 2008–09, the second course will be added, followed by the third in 2009–10, and the fourth in 2010–11. The program's development has been underwritten by grants from the states of Connecticut, Indiana, Maryland, Missouri, Ohio, Oklahoma, and South Carolina.

The new curriculum will be enhanced with the PLTW partnership concept, which puts the collective knowledge and efforts of secondary schools, colleges and universities, and industry to work for students. By engaging partners in the Biomedical Sciences Program, PLTW ensures that students will acquire the real-world knowledge and skills needed to succeed at the postsecondary level.



## The PLTW Professional Development and Support System

**L**ike all other PLTW program teachers, each PLTW Biomedical Sciences teacher participates in a world-class professional development program, and can access ongoing peer and technical support at the local, state, regional, and national levels.

Everyone teaching PLTW courses goes through an extensive professional development process, including an intensive, two-week PLTW Summer Training Institute. During these sessions, teachers experience the classes as their own students will, giving them invaluable insights into how to make the courses as engaging as possible when the educators teach them during the school year.

Besides attending Summer Training Institutes, every registered PLTW teacher has access to the Virtual Academy for Professional Development, which offers on-demand multimedia lessons and a subscription e-mail service for support and innovation that reaches a national network of PLTW educators.

PLTW partner schools, teachers, and school counselors are also part of a nationwide support and information network. This network includes PLTW State Leaders, PLTW Master Teachers, and the PLTW national staff, who are all available to lend support and answer questions via e-mail or phone.

There is also a special PLTW professional development program and network for school counselors, which includes an annual statewide awareness conference and a counselor's kit featuring a resource guide, promotional posters, handouts, and other resource materials.



# APPB Learning

*Biomedical Sciences instruction is activity-, project-, and problem-based*

**T**he Project Lead The Way® (PLTW) approach is simple—and effective. By being engaged in hands-on, real-world projects, the students begin to understand how the skills they are learning in the classroom can be applied in everyday life.

This approach is called activities-based, project-based, and problem-based (APPB) learning. Research shows that schools participating in APPB-learning experience increased student motivation, cooperative learning skills, and higher-order thinking.

But APPB-learning is only part of the reason that PLTW works for schools, teachers, and students nationwide. PLTW also links demanding mathematics and science concepts with top-quality academic and technical instruction.

*“I’ve always been interested in nursing, but being in this class has exposed me to a lot more options in the medical field. It’s got me interested in different paths that I didn’t think I’d be interested in.”*

—Kacie Gelvin,  
Summit Technology Academy,  
Lee’s Summit, Missouri



## Benefits Beyond the Classroom

**T**he project- and problem-based PLTW Biomedical Sciences curriculum helps students:

- Think creatively and critically
- Solve problems
- Communicate effectively
- Work in teams
- Develop time management and organizational skills
- Understand how scientific research is conducted, applied, and funded.

Making math and science meaningful for students makes sense—and it works. According to the 2005–06 TrueOutcomes/ PLTW assessment, PLTW is fulfilling its mission “to prepare an increasing and more diverse group of students to be successful in science, engineering, and engineering technology.”

In addition, *Rising Above the Gathering Storm: Energizing and Employing America for a Brighter Economic Future*, a report from the National Academy of Engineering, the National Academy of Sciences, and the Institute of Medicine, identified PLTW curriculum as “the model to use to create a national curriculum based on world-class standards.”

*“Students and teachers love the new PLTW Biomedical Sciences Program. The rigorous and relevant curriculum includes 21st-century skills that prepare students for postsecondary education and the workforce. PLTW is truly revolutionizing education.”*

—Terri Schulz,  
Leader of Program Innovation,  
Indiana State Department of Workforce Development



McKenzie Career Center student **Dhana Clarke** works with a model of the DNA molecule.

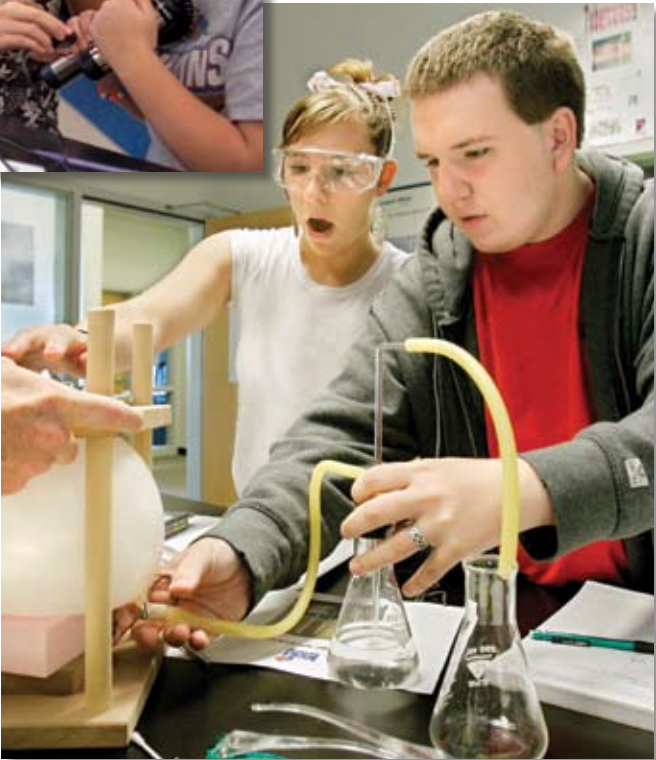


# PLTW Programs and Courses

*PLTW Biomedical Sciences courses are based on rigorous, relevant, hands-on learning*



Heather Petrie (left) and Angie Case work with a heart-rate monitor at Fort Mill High School.



Summit Technology Academy students Ashaley Freuck (left) and Micheal Glenn work on building a pump.

The Project Lead The Way® (PLTW) Biomedical Sciences curriculum makes courses (see box on page 10) relevant for students by engaging them in problems related to the human body, cell biology, genetics, disease, and other biomedical science topics.

There are no prerequisites to enter the program. It is a sequence of four courses, each building on the previous one. The first course, Principles of the Biomedical Sciences™, is the foundation course. This is followed by Human Body Systems™, Medical Interventions™, and the capstone course, Science Research™. Students should take college-preparatory mathematics and science courses each year along with their PLTW Biomedical Sciences course.

The program is flexible enough to meet a school's or student's individual scheduling needs. For example, students could take one Biomedical Sciences course each year beginning in ninth grade, or they could start in 10th grade with the foundation course, followed by Human Body Systems™ and Medical Interventions™ during junior year, and Science Research™ in senior year.

Other schools may choose to pair Principles of the Biomedical Sciences™ with Human Body Systems™ during the junior year, and offer Medical Interventions™ with Science Research™ in 12th grade. The program's flexibility makes the PLTW Biomedical Sciences curriculum ideal for both block scheduling and traditional seven-period schedules.



(From left) Joshua Jellema, Janelle Kibler, and Joshua Mercadel use a heart-rate monitor at Fort Mill High School.

## What Courses Are Available When?

**Fall 2007:** The first course—Principles of the Biomedical Sciences™—is field-tested in more than 40 schools in the seven funding states: Connecticut, Indiana, Maryland, Missouri, Ohio, Oklahoma, and South Carolina.

**Fall 2008:** The first course field test is expanded to additional schools; the second course (Human Body Systems™) is field-tested in original field test schools.

**Fall 2009:** The first and second course are available nationwide; the third course (Medical Interventions™) is field-tested.

**Fall 2010:** The third course is made available nationwide; the fourth course (Science Research™) is field-tested.

**Fall 2011:** All four courses are made available nationwide.



“I am so excited to teach a Biomedical Sciences curriculum that makes problems, projects, and activities the cornerstone of what you do in the classroom.”

— Peggy Hinzman

PLTW Biomedical Sciences Instructor,  
Summit Technology Academy,  
Lee's Summit, Missouri



# Four-Course Learning

*PLTW's new Biomedical Sciences curriculum consists of four courses*



Hamilton Southeastern High School students **Loor Alshaw** (left) and **Chris Pendergraft** work with a model of water molecules.



**Becky Howell**, Biomedical Sciences teacher at Fort Mill High School (left), works with **Heather Petrie** (center) and **Angie Case**.

McKenzie Career Center teacher **Paul Legge** details upcoming projects for his class.



**Katelyn Park** demonstrates the dissection of a sheep heart at Fort Mill High School.

## 1 Principles of the Biomedical Sciences™

Students explore the concepts of human medicine and are introduced to research processes and to bioinformatics. Hands-on projects enable students to investigate human body systems and various health conditions, including heart disease, diabetes, sickle-cell disease, hypercholesterolemia, and infectious diseases.

Over the length of the course, students work together to determine the factors that led to the death of a fictional person. After pinpointing those factors, the students investigate lifestyle choices and medical treatments that might have prolonged the person's life.

The course is designed to provide an overview of all the courses in the Biomedical Sciences Program and to lay the scientific foundation necessary for student success in the subsequent courses. The key biological concepts embedded in the curriculum include homeostasis, metabolism, inheritance of traits, feedback systems, and defense against disease. Where appropriate, engineering principles are also incorporated into the curriculum. These include the design process, feedback loops, fluid dynamics, and the relationship of structure to function.

## 2 Human Body Systems™

Students examine the processes, structures, and interactions of the human body systems to learn how they work together to maintain homeostasis (internal balance) and good health.

Using real-world cases, students take the role of biomedical professionals and work together to solve medical mysteries. Hands-on projects include designing experiments, investigating the structures and functions of body systems, and using data acquisition software to monitor body functions such as muscle movement, reflex and voluntary actions, and respiratory operation.

Important concepts covered in the course are communication, transport of substances, locomotion, metabolic processes, defense, and protection.

## 3 Medical Interventions™

Student projects investigate various medical interventions that extend and improve quality of life, including gene therapy, pharmacology, surgery, prosthetics, rehabilitation, and supportive care.

The course explores the design and development of various medical interventions, including vascular stents, cochlear implants, and prosthetic limbs. In addition, students review the history of organ transplants and gene therapy, and stay updated on cutting-edge developments via current scientific literature.

Using 3D imaging, data acquisition software, and current scientific research, students design a product that can be used as a medical intervention.

## 4 Science Research™

This capstone course gives student teams the opportunity to work with a mentor, identify a scientific research topic, conduct research, write a scientific paper, and defend team conclusions and recommendations to a panel of outside reviewers.

Each student team has one or more mentors from the scientific or medical community guiding its scientific research. This course may be combined with the capstone course from the engineering pathway, allowing students from the pathways to work together to engineer a new health care-related product or process innovation. (For more about our high school engineering program, please visit [www.pltw.org/curriculum/hs-engineering.html](http://www.pltw.org/curriculum/hs-engineering.html).)



# Dreams Come True

## Students can be Biomedical Sciences superstars

**P**lenty of young people dream about becoming a sports hero, rock star, or famous actor. That's normal and it's fun, but in most cases, the dream will always be just that—a dream.

That doesn't mean, however, that kids can't grow up to be superstars. Today's heroes aren't only the ones scoring touchdowns and making movies, they're also the ones finding cures to diseases, using advanced forensic techniques to solve crimes, developing high-tech medical devices that improve and save lives, and providing the expert care that helps patients reach their highest potential for health.

That's the result of studying biomedical sciences. It's cutting-edge, it's exciting, and it's a field where any kid who wants to be a superstar can find a place to shine.

**Kelly Mitchell** watches the data of a heart-rate monitor used as part of a class exercise at McKenzie Career Center.

Ask students what careers are available in the biomedical sciences, however, and you'll probably get blank stares or a description of some popular TV shows with medical themes: *CSI*, *Grey's Anatomy*, or *House*.

While it's true that the careers of forensic investigator, nurse, and physician all fall within the biomedical sciences field, the career opportunities available to students with the required skills and education background extend far beyond what's typically portrayed in the media.

The education requirements for biomedical sciences careers vary from graduate degrees for doctors, veterinarians, and research scientists to one-year to four-year programs for radiological and surgical technicians or physical therapy assistants.

Here's a quick look at four diverse biomedical sciences career options:

Tori Shaffer

### FOUR DIVERSE BIOMEDICAL SCIENCES CAREER OPTIONS

#### BIOMEDICAL ENGINEER

**What They Do:** Develop devices and procedures that solve medical and health-related problems by combining their knowledge of biology and medicine with engineering principles and practices.

**Interest Areas:** Some specialties within biomedical engineering are biomaterials, biomechanics, medical imaging, rehabilitation engineering, and orthopedic engineering.

**Education:** Bachelor's degree in biomedical engineering or another engineering specialty, such as mechanical or electronics engineering, plus specialized biomedical training. Typically requires a master's degree.

**Want to Learn More?** Check out the Biomedical Engineering Society at [www.bmes.org](http://www.bmes.org)

#### RADIATION THERAPIST

**What They Do:** As part of a radiation oncology team, radiation therapists use machines—called linear accelerators—to administer radiation treatment to cancer patients.

**Interest Areas:** Experienced radiation therapists may advance to manage radiation therapy programs in treatment centers or other health care facilities. With additional training and certification, therapists also can become dosimetrists, who use complex mathematical formulas to calculate proper radiation doses.

**Education:** Associate or bachelor's degree in radiation therapy, or associate or bachelor's degree in radiography, which is the study of radiological imaging, followed by a 12-month certificate program in radiation therapy.

**Want to Learn More?** Check out the American Society of Radiologic Technologists at [www.asrt.org](http://www.asrt.org)

#### MEDICAL ILLUSTRATOR

**What They Do:** Create graphic representations of medical or biological subjects for use in textbooks, pamphlets, exhibits, instructional films, civil or legal procedures, and teaching models.

**Interest Areas:** Medical illustrators can specialize in certain anatomical areas, such as the brain or the heart.

**Education:** Bachelor's degree combining art and pre-medical coursework, followed by a master's degree in medical illustration.

**Want to Learn More?** Check out the Association of Medical Illustrators at [www.ami.org](http://www.ami.org)



#### PHARMACY TECHNICIAN

**What They Do:** Prepare prescriptions; order supplies; maintain patient records, billing, and inventory; and receive and screen prescription drug orders for completeness and accuracy.

**Interest Areas:** Pharmacy technicians may be called upon to mix pharmaceutical preparations under the direction and supervision of the pharmacist, and assist in the care and cleaning of pharmacy equipment.

**Education:** Two-year pharmacy technician associate's degree program; option to earn state and national certification with additional training.

**Want to Learn More?** Check out the National Pharmacy Technician Association at [www.pharmacytechnician.org](http://www.pharmacytechnician.org)

**“** *I want to be a surgeon or an ER doctor and Biomedical Sciences helps with systems interactions, medical terms, and it's just really neat. I just like working with the body and all the science of it. We have CDs which help a lot because they are interactive and visual.* **”**

—Tori Shaffer,  
Summit Technology Academy, Lee's Summit, Missouri



Hamilton Southeastern High School students (from left) **Charlie Hehman, Kailey Jurkiewicz,** and **Hilary Garwood** work with Biomedical Sciences software on their laptops.





“I’ve always known, ever since middle school, that I wanted to have a medical career. Biomedical Sciences gives me a more focused approach than anything I could’ve taken at my high school. It’s a good college prep class, especially for a pre-med program.”

—Kevin Gray,  
Summit Technology Academy, Lee’s Summit, Missouri



“This class actually lets me learn by doing. I enjoy the experiments; they are fun, and I enjoy working in groups. It has helped me a lot to realize what scientists actually do, and it has helped me to understand different scientific careers.”

—Bradley Gano,  
Fort Mill High School, Fort Mill, South Carolina



“The experiments are really hands-on. The program has taught me a lot about the technological side of medicine, something I had not thought of before. We explore a lot of career options in medicine, many I did not know existed.”

—Mandy Nivens,  
Fort Mill High School, Fort Mill, South Carolina



Hamilton Southeastern High School students  
**Nelson Wong** (left) and **Kalp Juthani** dissect  
a sheep heart in class.



## What Employers Are Saying

“The PLTW Biomedical Sciences Program is a key part of preparing our younger generation for the exciting and fulfilling careers of the future. Its hands-on style and real-world projects will provide the knowledge and skills required to choose a field of study with more certainty and succeed in that field educationally and professionally. When can I interview the first graduates?”

—Alisa Wright,  
Chief Executive Officer,  
BioConvergence, LLC,  
Bloomington, Indiana



**Becky Howell**,  
Biomedical Sciences  
teacher at Fort Mill High  
School, shows her class a  
heart-rate monitor that will  
be used in an experiment.



**Bryan Castillo** takes  
part in an experiment  
using heart-rate monitors  
during a Biomedical  
Sciences class at Fort Mill  
High School.



# A Golden Opportunity

*PLTW classes let students discover whether science is right for them*

Let's face it. Biomedical Sciences sounds complicated. To succeed in this program a kid has to be a math and science whiz, right?

Not necessarily. Sure it helps if a student has a strong math and science background, but what's more important, says Dr. Carolyn Malstrom, director of curriculum for PLTW Biomedical Sciences, is a basic interest in the topic.

"Any student who is interested in biomedical sciences can succeed in this curriculum," says Dr. Malstrom. "But many kids will never know if they are interested because they'll never get a chance to learn what opportunities are available. The PLTW approach is to introduce students to the curriculum so that they can discover whether or not it interests them. Since the courses are hands-on, project-based, and problem-based, any student can be successful."

Because a solid foundation in math and science is necessary for students who want to to pursue a two- or four-year postsecondary program or beyond, each PLTW Biomedical Sciences course is taken concurrently with an appropriate-level math course and science course. High school preparation is basically the same as for any other science discipline—four years of math, science, and English courses. The ultimate goal of the program is to fully prepare students for academic success in any postsecondary program.

The curriculum gives students a taste of the variety, creativity, teamwork, and career possibilities available in the Biomedical Sciences field. They're excited about learning, they're preparing to take their game to the next level at college, and they know that the skills they're building can really change lives.

*"The instructors are very knowledgeable in science here. We've learned about how the body works and we're in the process of learning medical terminology that will help me in my career as a pediatrician."*

—Antonio Newbill,  
Summit Technology Academy, Lee's Summit, Missouri



## What I Wish I'd Learned in High School

There are several things that I wish I had been able to do in high school that I believe would have helped me in college. For example, my high school science classes did not prepare me for college labs. In my first chemistry lab, I was the only one who didn't know how to use a Bunsen burner. Also, I didn't know what some of the equipment was called, so I had to ask around. Another major problem for me was my computer illiteracy. Biomedical engineers need to be able to work with computers. There are so many programs and so much different software out there that I will need to know how to use someday, which makes me feel slightly intimidated. I believe that having had more hands-on experience with labs and computers would have made the transition from high school to college much easier."

—Lauren Rohwer,  
Biomedical Engineering  
Student, Mercer University,  
Macon, Georgia

# Resources

*Materials enrich the learning experience*

## Biomedical Sciences Career Exploration

- [ExploreHealthCareers.org](http://ExploreHealthCareers.org)
- U.S. Department of Labor Occupational Outlook Handbook, [www.bls.gov/oco](http://www.bls.gov/oco)
- National Science Foundation, [www.nsf.gov](http://www.nsf.gov)

## Biomedical Sciences Professional Organizations

- American Dental Association, [www.adu.org](http://www.adu.org)
- American Dental Hygienists' Association, [www.adha.org](http://www.adha.org)
- American Dietetic Association, [www.eatright.org](http://www.eatright.org)
- American Medical Association, [www.ama-assn.org](http://www.ama-assn.org)
- American Nurses Association, [www.nursingworld.org](http://www.nursingworld.org)
- American Society of Radiologic Technologists, [www.asrt.org](http://www.asrt.org)
- American Veterinary Medical Association, [www.avma.org](http://www.avma.org)
- Biomedical Engineering Society, [www.bmes.org](http://www.bmes.org)
- National Pharmacy Technician Association, [www.pharmacytechnician.org](http://www.pharmacytechnician.org)
- National Association of Emergency Medical Technicians, [www.naemt.org](http://www.naemt.org)
- The Association of Medical Illustrators, [www.ami.org](http://www.ami.org)

## Biomedical Sciences Student Organizations

- Biomedical Science Careers Program, [www.bscp.org](http://www.bscp.org)
- HOSA (Health Occupations Students of America), [www.hosa.org](http://www.hosa.org)







## *Forging the Innovation Generation: Biomedical Sciences*

Find out what you can do to help students prepare  
for a successful future in the biomedical sciences.

Visit [www.pltw.org](http://www.pltw.org) or call 518-877-6491.

